|  |  |  |
| --- | --- | --- |
|  |  | Breakthrough COVID infection post-booster |
| Covariate | Level | No (N=163)N (%) | Yes (N=24)N (%) | P-value\* |
| Sex | Male | 84 (51.53) | 11 (45.83) | 0.602 |
| Female | 79 (48.47) | 13 (54.17) | - |
| Race\* | Black | 62 (38.99) | 6 (26.09) | 0.232 |
| Other | 97 (61.01) | 17 (73.91) | - |
| Age <=65 years | No | 66 (40.49) | 13 (54.17) | 0.205 |
| Yes | 97 (59.51) | 11 (45.83) | - |
| Prior LOT (>2) | No | 121 (76.1) | 14 (63.64) | 0.208 |
| Yes | 38 (23.9) | 8 (36.36) | - |
| Prior SARS CoV-2 exposure | Negative | 44 (62.86) | 8 (80) | 0.481 |
| Positive | 26 (37.14) | 2 (20) | - |
| IgG <=400 mg/dl | No | 122 (74.85) | 17 (70.83) | 0.674 |
| Yes | 41 (25.15) | 7 (29.17) | - |
| IgG <=700 mg/dl | No | 77 (47.24) | 10 (41.67) | 0.609 |
| Yes | 86 (52.76) | 14 (58.33) | - |
| Prior anti-CD38 antibodies | No | 113 (69.33) | 14 (58.33) | 0.281 |
| Yes | 50 (30.67) | 10 (41.67) | - |
| Lenalidomide maintenance | No | 124 (76.07) | 19 (79.17) | 0.739 |
| Yes | 39 (23.93) | 5 (20.83) | - |
| BCMA-targeted therapies | No | 157 (96.32) | 24 (100) | 1.000 |
| Yes | 6 (3.68) | 0 (0) | - |
| BA pseudovirus neutralization IC50#  | Median | 363.83 | 145.48 | 0.207 |
| WA1 pseudovirus neutralization IC50#  | Median | 1884.36 | 1672.13 | 0.707 |

Suppl Table 1. Correlative analysis of breakthrough SARS CoV-2 infection following booster vaccination.

\* The p-value is calculated by a non-parametric Mann-Whitney U test for numerical covariates; and chi-square test or Fisher's exact for categorical covariates, where appropriate.

# Values below threshold (<100) were assigned as 50.

BA: Omicron; WA1: Ancestral Wuhan strain

\*Other race (n=114) includes n=110 Caucasian, n=2 Asian, n=1 Native American, n=1 Native Hawaiian or Pacific Islander.